

CLAIMS

1. An emission enhancing coating for a surface, which coating comprises at least one electrically conductive transparent film and at least two non-conductive films, wherein the conductive and non-conductive films have been applied alternately on top of one another.

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2. A coating according to claim 1, wherein the total thickness of the coating is smaller than the wavelength of the radiation to be emitted by the surface.

10 3. A coating according to claim 1 or 2, wherein the total thickness of the coating is at most 100 micrometers.

4. A coating according to claim 3, wherein the total thickness of the coating is at most 20 micrometers.

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5. A coating according to claim 4, wherein the total thickness of the coating is at most 5 micrometers.

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6. A coating according to any one of claims 1-5, wherein the electrically conductive film comprises a metal.

7. A coating according to claim 6, wherein the conductive film comprises a metal chosen from the group of chrome, nickel and rhodium.

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8. A coating according to any one of claims 1-7, wherein the electrically conductive transparent film comprises a semiconductor chosen from the group of doped metal oxides, conductive nitrides and carbides.

9. A coating according to claim 8, wherein the semiconductor is chosen from the group of, preferably, tin-doped indium oxide, fluorine-doped tin oxide and aluminum-doped zinc oxide.

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10. A coating according to any one of claims 1-9, wherein each of the electrically conductive and non-conductive films is transparent.

11. A coating according to any one of claims 1-10, wherein the 10 non-conductive film comprises a non-conductive material chosen from the group of non-conductive metal oxides, metal fluorides, metal carbides and metal nitrides.

12. A coating according to claim 11, wherein the non-conductive films 15 comprise silicon oxide.

13. An article with a surface with a low emissivity to which a coating according to any one of claims 1-12 has been applied.

20 14. An article according to claim 13, wherein, as a first film, a non-conductive transparent film has been applied to the surface.

15. A metal foil to which a coating according to any one of claims 1-12 has been applied.

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16. A solar cell to which a coating according to any one of claims 1-12 has been applied.

30 17. A light reflector to which a coating according to any one of claims 1-12 has been applied.

18. A method for applying an emission enhancing coating according to
any one of claims 1-12 to a surface, wherein the conductive and
non-conductive films have been applied alternately on top of one another to
5 the surface.

19. A method according to claim 18, wherein, as a first film, a
non-conductive transparent film has been applied to the surface.

AMENDED CLAIMS

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original claims 1-19 replaced by amended claims 1-19 (3 pages)]

1. An emissivity enhancing coating for a surface with a low emissivity, which coating comprises at least one electrically conductive transparent film and at least two non-conductive films which non-conductive films each have a thickness of 500 nm to 1500 nm, and wherein the conductive and non-conductive films have been applied alternately on top of one another.
2. A coating according to claim 1, wherein the total thickness of the coating is smaller than the wavelength of the radiation to be emitted by the surface.
- 10 3. A coating according to claim 1 or 2, wherein the total thickness of the coating is at most 100 micrometers.
4. A coating according to claim 3, wherein the total thickness of the coating is at most 20 micrometers.
- 15 5. A coating according to claim 4, wherein the total thickness of the coating is at most 5 micrometers.
6. A coating according to any one of claims 1-5, wherein the electrically conductive film comprises a metal.
- 20 7. A coating according to claim 6, wherein the conductive film comprises a metal chosen from the group of chrome, nickel and rhodium.
- 25 8. A coating according to any one of claims 1-7, wherein the electrically conductive transparent film comprises a semiconductor chosen from the group of doped metal oxides, conductive nitrides and carbides.

9. A coating according to claim 8, wherein the semiconductor is chosen from the group of, preferably, tin-doped indium oxide, fluorine-doped tin oxide and aluminum-doped zinc oxide.

5 10. A coating according to any one of claims 1-9, wherein each of the electrically conductive and non-conductive films is transparent.

11. A coating according to any one of claims 1-10, wherein the non-conductive film comprises a non-conductive material chosen from the 10 group of non-conductive metal oxides, metal fluorides, metal carbides and metal nitrides.

12. A coating according to claim 11, wherein the non-conductive films comprise silicon oxide.

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13. An article with a surface with a low emissivity to which a coating according to any one of claims 1-12 has been applied.

14. An article according to claim 13, wherein, as a first film, a 20 non-conductive transparent film has been applied to the surface.

15. A metal foil to which a coating according to any one of claims 1-12 has been applied.

25 16. A solar cell to which a coating according to any one of claims 1-12 has been applied.

17. A light reflector to which a coating according to any one of claims 1-12 has been applied.

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18. A method for applying an emission enhancing coating according to any one of claims 1-12 to a surface, wherein the conductive and non-conductive films have been applied alternately on top of one another to the surface.
- 5 19. A method according to claim 18, wherein, as a first film, a non-conductive transparent film has been applied to the surface.